

1st Quarter and Annual Progress Report
FY2000 Project 1200
Grant #C9996103-08-01
April 5, 2004

Last Update: January 2, 2004
J. Wise

Project No: 1200 Strawberry River Nonpoint Source Assessment Survey

Work plan approved August 1, 2000.

Task 1: Watershed Land Use Assessment

March 31, 2001

1.1 The land use inventory is approximately 20% complete

June 30, 2001

1.1 The land use inventory is approximately 30% complete

September 31, 2001

1.1 The land use inventory is approximately 75% complete

March 31, 2002

1.1 Additional land use data has been collected. Additional visits to some of the dairies was made to refine discrepancies between data bases. The land use inventory is approximately 85% complete

June 30, 2002

1.1 Additional land use data has been collected. More visits to the dairies were made to refine the data base. The land use inventory is approximately 90% complete

September 30, 2002

1.1 Additional land use data has been collected. The land use inventory has been completed.

March 31, 2003

The development of GIS base maps has started. These maps will be used to display not only the land use data, but the fish community, macroinvertebrate community and water quality sampling stations sites.

July 2, 2003

The GIS base maps have been developed.

Task 2: Surface Water Assessment

December 31, 2000

2.1 QAPP plan for the project was approved August 16, 2000.

2.2 Sites have been identified for USGS stream gage installations.

2.4 Water quality sample sites have been located and GPS data collected from the sites.

March 31, 2001

2.4.2 Water samples were collected from the sites. Base Flow.

June 30, 2001

2.4.2 Water samples were collected from WQ sites 5/1/01.

2.4.2 Water samples were collected from WQ sites 6/19/01.

2.4.2 Additional Bacteria samples were collect from WQ sites 6/6/01.

2.6.1 Diel DO stations have been selected.

2.7.1 Macroinvertebrate stations have been selected.

2.8.1 Fish community sample sites have been selected.

September 31, 2001

2.4.2 Water samples were collected from WQ sites 8/27/01.

2.4.2 Additional Bacteria samples were collect from WQ sites four times
7/2/01, 7/23/01, 9/13/01, 9/27/01

2.6.2 72-hour diel DO was collected at 12 sites

2.7.2 Macroinvertebrate samples were collected for 14 sites;
5 sites not sampled because of no flow.

2.8.1 Fish community samples were collected from 16 sites.

December 31, 2001

2.4.2 Water samples were collect from WQ sites 11/06/01

2.7.3 Half of the macroinvertebrate samples have been picked.

2.8.1 Fish community samples have been sorted, identified, and cataloged.

March 31, 2002

2.3.2 Historical water quality data has been collected.

Some analysis has been accomplished on the data.

Outside water quality data has been solicited.

2.4.2 Water samples were collect from WQ sites 01/22/02, low flow
Water samples were collect from WQ sites 01/24/02, storm flow
Water samples were collect from WQ sites 03/12/02, storm flow

2.7.4 The fall macroinvertebrate samples have been picked.
Half of the macroinvertebrate samples have sorted and identified.

2.8.1 Fish community data has been analyzed.
All fish data has been entered into ADEQ Fish Community database.

June 30, 2002

2.4.3 Water samples were collect from WQ sites 04/08/02 and 04/29/02, both storm flows,
and on 06/17/02, low flow

Additional bacteria samples were collect from WQ sites on 06/05/02.

2.7.5 Continued identifying macroinvertebrates from the fall samples. Spring
macroinvertebrate samples have been collected form each of the sites.

September 30, 2002

2.4.4 Water samples were collect from WQ sites on 8/27/02, summer low flow.
Bacteria samples were collect from WQ sites on 07/23/02, 8/27/02, 9/4/02 and
9/19/02.
Water quality data collected to date has been tabulated for final report preparation.
Bacteria data collected to date has been tabulated for final report preparation.

- 2.7.6 Identification has been completed on the fall macroinvertebrate samples. Continued identifying macroinvertebrates from the spring samples.
- 2.6.3 72-hr, DO was taken at 143L, 143M, 143I, WWTP, 143IB, 143IBB
- 2.6.4 72-hr, DO was taken at 143B, 143P, SBR01, SBR02, SBR03, and WHI 24
- 2.8.1 Fish were collected at three sites from North Big Creek

December 31, 2002

- 2.4.5 Water samples were collect from WQ sites on 12/30/02, late fall low flow. Water quality data collected to date has been tabulated for final report preparation. Bacteria data collected to date has been tabulated for final report preparation.
- 2.7.7 Continued identifying macroinvertebrates from the spring samples.
- 2.8.2 Fish identification has been completed on the samples collected from North Big Cr.

March 31, 2003

- 2.4.6 Water samples were collect from WQ sites on 2/24/03, and 3/19/03; both were storm flow samples.
- 2.7.8 Continued identifying macroinvertebrates from the spring samples.

July 2, 2003

- 2.4.7 Water samples were collect from WQ sites on 6/19/03, storm flow samples. Continued building water quality, fish community, etc, data tables
- 2.7.9 Continued identifying macroinvertebrates from the spring samples.

September 30, 2003

- 2.4.6 All water quality data has been entered into the Departments on-line searchable data base. It is being prepared to be entered into STORET. All the data has been prepared for the final report.
- 2.7.4 All macroinvertebrate samples have been picked, identified and the data has been prepared for the final report.
- 2.8.4 All fish community data has been prepared for the final report.

December 31, 2003

- 2.7.5 All macroinvertebrate data has been entered into the Departments on-line searchable data base.
- 2.8.4 All fish community data has been entered into the Departments on-line searchable database..

Task 3: Ground Water Assessment

- 3.2.1 Some wells have been located for sampling.
- 3.2.2 Outside ground water data has been requested.

June30, 2002

- 3.2.3 Additional well and landowner data has been gathered.

September 30 2002

- 3.1.1 Well log data has been gathered from several hundred wells in the watershed.
- 3.2.1 Ground water samples were collected from 64 wells and/or springs. Bacteria samples were collected from 22 wells and/or springs.

GPS data was collected from each of the wells and/or springs.

December 31, 2002

3.2.1 Ground water data has been tabulated. Data from the wells collected has been sent to the well owners.

Additional work has been accomplished to collect samples from a number of the wells that showed elevated nutrients for additional analysis.

March 31, 2003

3.2.1 Additional ground water samples were collected from 18 wells and/or springs that were previously been tested and were shown to have elevated nitrate concentrations. The samples were shipped to the USGS lab in Colorado for a specific battery of test. The data has been received from the samples, but is not yet tabulated or analyzed..

July 2, 2003

Began compiling ground water quality data and building tables for final report.
Began analyzing ground water quality data for report.

September 30, 2003

3.2.7 All ground water data has been prepared for inclusion into the final report.

Task 4: Stream Bank Assessment Survey

July 31, 2001

4.1.1 Conservation District data has been obtained as a portion of basin wide survey.

4.1.1 ADEQ surveyed stream banks between Hwy. 354 and Hwy. 289.

September 31, 2001

4.1.1 ADEQ began surveying stream banks in Lawrence County.

4.1.2 Several stream banks were visited for possible intensive surveying.

4.1.2 Stream banks have been identified for intensive work up.

December 31, 2001

4.1.2 A stream bank was surveyed. Bank pins were installed.

March 31, 2002

4.1.1 Additional stream bank surveys were initiated in Lawrence County.

4.1.2 The streambank was resurveyed in January and the bank pins were repositioned.

December 31, 2002

4.1.3 The stream bank was resurveyed. Most of the bank pins were missing.

December 31, 2003

4.1.4 The stream bank was resurveyed in October. The data has been prepared for inclusion into the final report.

Task 5: Report Preparations

January 2, 2001

5.1, 5.3 Quarterly Progress Report and Quarterly QA Report submitted to ASWCC.

March 31, 2001

5.1, 5.3 Quarterly Progress Report and Quarterly QA Report submitted to ASWCC.

July 2, 2001

5.1, 5.3 Quarterly Progress Report and Quarterly QA Report submitted to ASWCC.

September 31, 2001

5.1, 5.3 Quarterly Progress Report and Quarterly QA Report submitted to ASWCC.

December 31, 2001

5.1, 5.3 Quarterly Progress Report and Quarterly QA Report submitted to ASWCC.

5.2, 5.4 Annual progress report submitted to ASWCC.

March 31, 2002

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

June 30, 2002

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

September 30, 2002

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

December 31, 2002

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

March 31, 2003

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

5.5 Preparation of the draft report has begun.

July 2, 2003

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

5.5 Preparation of the draft report has continues.

September 30, 2003

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

5.5 Draft versions of the background, introduction, watershed description, fish community and macroinvertebrate sections of the final report have been completed. Preparation of the other sections continue. The draft report is approximately 70% complete.

December 31, 2003

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

An annual was submitted to ASWCC in December, 2003.

5.5 A Draft Final Report was submitted to ASWCC in December, 2003..

MARCH 31, 2004

5.1, 5.3 Quarterly Progress Report, Quarterly QA Report, and Quarterly MBE/WBE report submitted to ASWCC.

5.5 Final review of the final report is almost complete. Formatting the report for publication continues. The report should be ready for printing middle of April.

Work Plan Task Completion Progress			
Task # subtask	Description	Remaining Work	% Complete
1	Watershed Land Use Assessment		100
1.1	Survey watershed for land use	None	100
1.2	Inventory poultry operations	None	100
1.3	Inventory swine operations	None	100
1.4	Inventory cattle operations	None	100
1.5	Inventory dairy operations	None	100
1.6	Inventory other land uses	None	100
1.7	Determine Lats & Longs	None	100
1.8	Prepare data for report	Prepare GIS Layers and map	100
2	Surface Water Assessment		100
2.1	QAPP approval	None	100
2.2	USGS gaging stations	Spring sampling	100
2.3	Outside data assimilation	None	100
2.4	Collect water samples	Spring sampling	100
2.5	Diurnal DO samples	None	100
2.6	Macroinvertebrate assessment	Spring sampling	100
2.7	Fish community assessment	None	100
2.8	Prepare data for report	Analyze data	100
3	Ground water Assessment	None	100
3.1	Outside data assimilation	None	100
3.2	Locate and sample wells/springs	None	100
3.3	Prepare data for report	Analyze data for report	100
4	Stream Bank Assessment		100
4.1	Inventory streambanks	None	100
4.2	Intensive streambank survey	None	100
4.3	Resurvey streambank	*None	100
4.4	Pictorial documentation	None	100
4.5	Prepare data for report	Analyze data for report	100
Note	The streambank will be surveyed again the fall of 2003		
5	Report Preparations		98
5.1	Quarterly Progress Reports	0 report pending*	100
5.2	Annual Progress Reports	0 report pending	100
5.3	Quarterly QAQC Reports	0 report pending	100
5.4	Annual QAQC Report	0 report pending	100
5.5	Draft Report	Continue report preparation	100
5.6	Final Report	Review of draft	90
	* shortened project time by 4 quarters		
Total Project Completion as of March 30, 2004			99